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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. FIRMATION NO. CON 10/797,954 03/11/2004 GP-301717 4860 Pei-Chung Wang **EXAMINER** 7590 12/15/2004 JEFFREY A. SEDLAR SAETHER, FLEMMING General Motors Corporation ART UNIT PAPER NUMBER Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 3677 Detroit, MI 48265-3000

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/797,954	WANG ET AL.
	Examiner	Art Unit
	Flemming Saether	3677
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address JU
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on	_•	
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 18-37 is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6) Claim(s) <u>18-37</u> is/are rejected.		
7) Claim(s) is/are objected to.	La dia anno de la casa de	
8) Claim(s) are subject to restriction and/or	r election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examine	r.	
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correct	•	
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action of form P10-192.
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:)-(d) or (f).
1. Certified copies of the priority documents have been received.		
 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 		
3. Copies of the certified copies of the prior application from the International Bureau		ed in this National Stage
* See the attached detailed Office action for a list	• • • • • • • • • • • • • • • • • • • •	ed.
Attachment(s)		
1) Motice of References Cited (PTO-892)	4) Interview Summary	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate Patent Application (PTO-152)
3) Linformation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	· · · · · · · · · · · · · · · · · · ·

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18, 19, 24, 28 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Newton (US 3,772,957). Newton discloses a rivet (44) comprising a head (20) and a body portion (18) extending away from a bottom surface of the head and including radial passages (28). The body having an interior cavity with an adhesive (24) disposed therein adapted to flow out the passages. The rivet is considered as having a "piercing edge" at an end of the body portion since the claims do not include any distinguishing features to the "piercing edge" also, the body is considered as having a open end inboard of the edge since the claims are written as "comprising" thus would not preclude the mandrel in Newton from occupying the open end. Lastly, the flow of the adhesive during the insertion of the piercing edge is merely an intended use of which Newton would be capable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 21-23, 25-27, 31-36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newton. Newton does not disclose the specific material of the rivet not adhesive as claimed. However, the materials of the rivet and of the adhesive are known and available as indicated in applicant's disclosure and the skilled artisan, at the time the invention was made, would have recognized to use the material in the rivet of Newton in order to provide a superior rivet for depending upon its' application. Indeed, it has been recognized to use different material for different applications since it is known that certain materials operate better then others depending upon the environment.

Claims 18, 19, 21-29 and 31-17 are alternatively rejected under 35 U.S.C. 103(a) as being unpatentable over Bray (US 180,747) in view of Newton. Bray discloses a rivet (A) comprising a head (a) and a body (b). The body includes an open ended interior cavity (not labeled) and a piercing edge (c) so as to be inserted through first and second member (see Fig. 2). Bray does not disclose the interior cavity including an adhesive. As described above, Newton discloses a rivet having an interior cavity provided with an adhesive (24) and includes radial passages for transporting the adhesive upon setting the rivet. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the rivet of Bray with an adhesive and the radial passages as disclosed in Newton in order to form a fluid tight joint as discussed in Newton. The fluid tight joint would prevent fluid, such as water, from coming between the first and second members and causing corrosion of the members

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as well as the rivet. Again, the materials of the rivet and of the adhesive are known and available as indicated in applicant's disclosure and the skilled artisan, at the time the invention was made, would have recognized to use the material in the rivet of Newton in order to provide a superior rivet depending upon its' particular application. Indeed, it has been recognized to use different material for different applications since it is known that certain materials operate better then others depending upon the environment.

Claims 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newton or Bray as modified Newton as applied to claims 18, 19, 28 and 19 above and further in view of Sweeney (US 5,044,852). The interior cavity of Newton does not disclose longitudinal channels. Sweeney teaches longitudinal channels (48) to facilitate the flow of an adhesive. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the device of Newton or modified Bray with channels as disclosed in Sweeney for the same reasons and facilitating the flow of an adhesive. The inclusion of channels to cavity of Newton or modified Bray would improve the flow the adhesive out of the cavity to form a better seal.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 703-308-0182. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Flemming Saether Primary Examiner Art Unit 3677